



Catherine McCracken
05/27/99 05:31 PM

To: Catherine McCracken/R9/USEPA/US@EPA
cc:
Subject: Re: OW Proposed Revisions to CLO4 Fact Sheet

Michael Osinski@EPA on 05/11/99 09:06:36 AM

Toxicology

The EPA held an external peer review of the draft toxicological review document for perchlorate on February 10-11, 1999 in San Bernardino, CA which was open to the public. **The draft presents an updated human health risk assessment as well as an ecological screening assessment of newly performed studies on the toxicity of perchlorate. The human health risk assessment model harmonizes noncancer and cancer approaches to derive a single oral risk benchmark based on precursor effects for both neurodevelopmental and thyroid neoplasia.** The draft proposed oral reference-dose risk benchmark (RfD), as proposed is protective of potential cancer because of new perchlorate data on the lack of genotoxicity and the reversibility of thyroid hyperplasia. The proposed oral risk benchmark is of 0.0009 mg/kg/day. is based on thyroid effects evidenced in 5-day-old rats:

An The proposed harmonized RfD is an oral risk benchmark estimate of the that amount of perchlorate, which when ingested daily over a lifetime is anticipated to be without adverse health effects (both noncancer and noncancer) to humans, including sensitive subpopulations. Finalizing the oral **harmonized** RfD requires completion of additional toxicology studies and further evaluations of the toxicology results. A second peer review workshop has been tentatively scheduled for January of 2000.

As a continuum of the risk assessment process for perchlorate, following the establishment of a final oral **harmonized** RfD, a drinking water Health Advisory will be developed. Based on the current draft provisional **harmonized** RfD, and default body weight (70 kg) and water consumption (2 L) values, a drinking water equivalent level (DWEL) would be calculated at 31.5 ppb. The DWEL is a safe level that assumes all perchlorate exposure comes from drinking water and does not take into account the contribution of perchlorate from other sources, which will be considered in developing Health Advisory levels. Therefore, based on the current provisional status of the **harmonized** RfD along with other considerations necessary to provide guidance on perchlorate, the Agency cannot recommend an interim guidance level at this time.

Regulatory/Federal

There is currently no federal National Primary Drinking Water Regulation for perchlorate. It is on the Safe Drinking Water Act's Contaminant Candidate List, but before a determination to regulate can be made, data gaps must be filled regarding health effects, treatment technologies, occurrence, and analytical methods. The EPA will issue a Health Advisory once the **final harmonized oral** RfD is finalized. Finding these answers.....etc.